

# Long Beach Bicycle Master Plan Recommended Improvements

The recommended system and improvements consists of three distinct components 1) a bicycle friendly roads and bikeways system 2) bicycle parking and support facilities and 3) related safety, education and community and employer outreach.

## **Bicycle System**

Bicyclists are allowed on all streets and roads (except limited access highways) regardless of whether they are a part of the bikeway system. The bikeway system is a tool that allows the City to focus and prioritize its implementation efforts.

The recommended Long Beach bikeway system focuses on connecting existing segments of bike lanes, addressing routes used by bicyclists, and analyzing specific opportunities and constraints. The street grid pattern offers several distinct through corridors connecting residential areas with activity centers such as downtown, schools, and parks. The bicycle network is based on a primary system of north-south and east-west corridors, using a combination of paths, lanes and routes. The bikeway projects are broken down into short, mid-and long-term categories. The proposed short-term bikeway system improvements are shown in Figure 8 and the medium/long-term in Figure 9.

The top short-term bikeway projects were selected by staff, the public, and consultants based on their local knowledge and cycling experience, the orientation of funding programs, and other planning criteria.

## PROPOSED BICYCLE FACILITIES -- SHORT-TERM

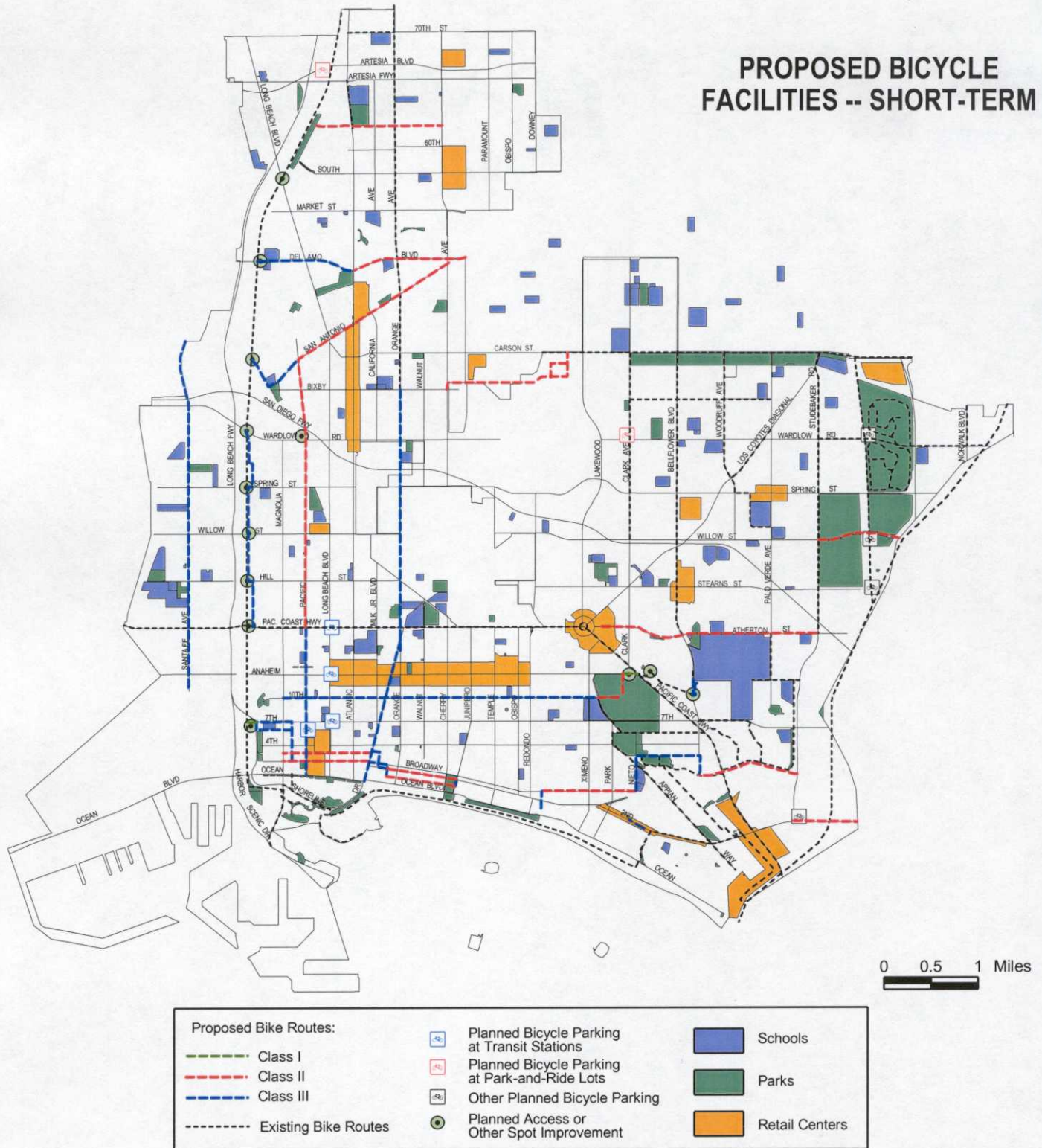


Figure 8

## PROPOSED BICYCLE FACILITIES -- SHORT-TERM

Long Beach Bicycle Master Plan

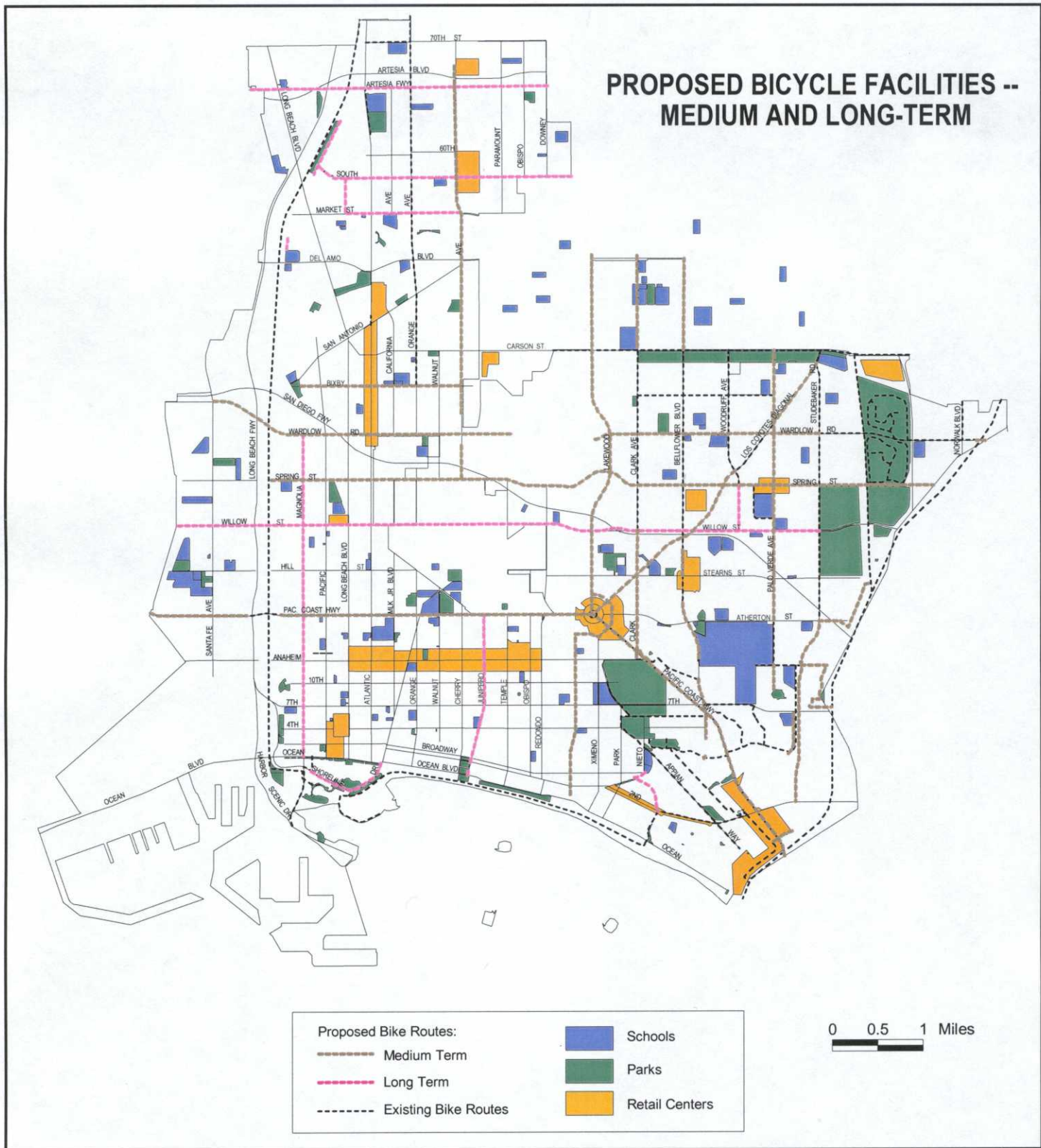


Figure 9  
**PROPOSED BICYCLE FACILITIES -- MEDIUM AND LONG-TERM**  
 Long Beach Bicycle Master Plan

## **Creating a Bikeway System**

There is an established methodology for selecting a bikeway system for a community which includes careful assessment of the existing system, the input from the community and consultants expertise.

The existing network of bikeways in the City and in adjacent cities and counties provides a basis for Long Beach. The process and specific analysis of the existing conditions is explained in the previous chapters.

The real human factor is input from the local bicycle community and City staff who are already familiar with the constraints and opportunities in Long Beach. Input was received through three public workshops sessions, Technical Advisory Committee meetings and surveys at which time participants were asked to identify and prioritize potential routes and programs that would meet their bicycle needs.

In addition, the consultant team considered more technical criteria to select the most feasible projects.

- Connectivity
- Travel volumes and speeds
- Amount of side friction (driveways, side streets)
- Curb-to-curb width
- Pavement condition
- Access from residential areas
- Number of destinations served (schools, employment centers, transit stations, parks, etc.)
- Topography
- Integration into the regional system
- Adjacent land use
- On-street parking
- Accident data and safety concerns
- Existing bicycling patterns
- Existing bottlenecks or constraints
- Existing opportunities such as planned roadway improvements

The Long Beach bikeway system has been developed using such criteria and the results total 35 ranked bikeway projects. The bikeway projects are ranked (see Table 4) based on a weighted

***Recommended Short-Term Bikeway System and Projects***

scoring system from 1 to 5; 1 being the lowest and 5 being the highest score based on the following criteria:

1. Destinations served
2. Public and Technical Advisory Committee (TAC) preferences
3. Coverage and connectivity
4. Cost-effectiveness and ease of construction
5. Safety (elimination of problems or improvement of existing conditions)

The scores are based on the information returned from the public, TAC and the judgment of the consultant team.

The projects that received a score of 19 or above are the top priority projects for short-term project implementation and are targeted for completion in the next five years. There are ten bikeway projects ranked in the short-term category:

- Downtown-Alamitos Bay Bikeway
- Los Angeles River Access
- Midtown 10<sup>th</sup> Street Connection
- CSULB
- Alamitos Avenue-Orange
- Westminster Avenue Bikeway
- Pacific Avenue-San Antonio Drive Bikeway
- Del Amo Boulevard Bikeway
- Pacific Center Boeing Site
- Harding Street

In addition to the nine ranked projects, three additional projects are suggested for the short-term. These other programs include:

- Bikeway signing program
- Bicycle parking
- Bicycle safety education

***Recommended Mid- to Long-Term Bikeway System***

Those projects that scored between 14 and 18 are mid-term Projects that are planned for implementation between six and 15 years. Fifteen mid-term projects include:

- Spring Street Bikeway
- Shoreline Pathway Feasibility Study
- West Wardlow Road
- Termino Avenue -Lakewood Boulevard
- Bellflower Boulevard
- Studebaker Road
- Los Coyotes Diagonal
- College Park Drive - Stevely Avenue - Anaheim Road
- Clark Avenue
- Santa Fe Avenue
- Cherry Avenue
- Palo Verde Avenue
- Bixby Road
- Pacific Coast Highway
- East Wardlow Road

The remainder of the bikeway projects ranking 9 to 13 are long-term Projects, planned for implementation between 16 and 20 years from plan adoption. There are ten projects in the long-term:

- Junipero Avenue
- Magnolia Avenue
- Willow Street
- Artesia Boulevard
- Woodruff Avenue
- Toledo-Livingston Drive
- Shoreline Drive
- Market Street
- South Street
- Atherton Street Bridge at Willow

The short, mid-and long-term schedule may change according to available funds, changing priorities, other roadway projects that coincide, or other factors. Mid-term and long-term projects are less defined than short-term projects.

***Recommended Project  
Sheets***

Each recommended short-term project is presented on its own Project Sheet. The Project Sheets are designed to be used as a direct resource and addendum to funding applications. Each Project Sheet provides key information on the proposal including cost, location, and sample cross sections.

In addition to implementing the recommended short-term projects, all of the action items identified in the goals and objectives section should be implemented, as resources become available. The action items create the framework for an effective bicycle system and are an important means of implementing and maintaining the policies established in the Plan.

**Table 4 Bikeway Project Rankings**

Bikeway Project	Destinations Served	Public/ TAC Preference	Coverage/ Connectivity	Cost- Effectiveness/ Ease of Construction	Safety	TOTAL
Downtown-Alamitos Bay	5	5	5	3	4	22
Los Angeles River Access	5	5	5	3	3	21
Midtown 10 <sup>th</sup> Street Connection	5	4	5	3	3	20
CSLUB	5	3	4	5	3	20
Alamitos Avenue-Orange Avenue	5	4	4	5	2	20
Westminster Avenue	3	3	4	5	4	19
Pacific Avenue-San Antonio Drive	5	2	5	4	3	19
Del Amo Boulevard	3	5	4	3	4	19
Pacific Center Boeing Site	3	5	3	5	3	19
Harding Street	3	5	2	5	4	19
Spring Street	3	3	5	4	3	18
Shoreline Pathway Feasibility Study	4	2	5	2	5	18
West Wardlow Road	4	2	4	4	4	18
Termino Avenue-Lakewood Boulevard	3	3	4	4	3	17
Bellflower Boulevard	4	3	2	4	4	17
Studebaker Road	2	3	3	5	4	17
Los Coyotes Diagonal	3	3	3	5	3	17
College Park Dr.-Stevely Ave.-Anaheim Rd.	5	2	3	4	2	16
Clark Avenue	3	2	4	4	3	16
Santa Fe Avenue	2	2	4	5	2	15
Cherry Avenue	2	2	3	4	4	15
Palo Verde Avenue	3	3	3	3	3	15
Bixby Road	2	2	3	5	3	15
Pacific Coast Highway	3	3	4	3	2	15
East Wardlow Road	2	2	2	5	3	14
Junipero Avenue	2	1	4	5	1	13
Magnolia Avenue	3	2	3	3	2	13
Willow Street	3	3	2	2	2	12
Artesia Boulevard	2	1	3	3	3	12
Woodruff Avenue	1	1	2	5	2	11
The Toledo-Livingstone Drive	2	1	3	3	2	11
Shoreline Drive	3	1	1	4	2	11
Market Street	2	1	3	3	1	10
South Street	1	1	3	3	1	9
Atherton Street Bridge at Willow	3	1	3	1	1	9

**Project 1:**  
**Bikeway Signing**  
**Program**

Signs help bicyclists find and travel on routes. The signs also provide a safety measure for both bicyclists and motorists.

***Ranking - Short-term***  
***General***

This project consists of bicycle logo signs, directional signs, safety signs, location signs, bicycle stencils and kiosks as approved by Caltrans.

***Responsibility - Long***  
***Beach City***

***Existing Problem - Lack***  
***of existing signs***

***Classification - N/A***

***Length/Width - N/A***

- Bicycle Logo Signs posted along the primary north-south and east-west corridors. This type of sign helps direct travel by having a bicycle logo and can also have signs that indicate the total number of miles to the end destination. A recommended bike logo sign for Long Beach is shown in Figure 10.
- Bike Route and Bike Lane Signs are posted where existing or new bikeways conform to specific Caltrans standards. These signs provide assurance to cyclists that they can expect a consistent type of bikeway. In addition, the signs help advise motorists to expect bicycles on the designated street. This type of signage also illustrates a bicycle logo and can have distance indicators in miles to the final destination.
- Safety Signs can be created that warn either motorists of bicyclists or caution bicyclists of oncoming motor vehicles. Both of these types of signs help increase safety.
- Location signs are needed to help bicyclists use off street bike paths more easily. In particular, it is difficult to find the riverbed bike paths entrances, and once on the bike path it is difficult to determine where to get off the path to access other routes or destinations in the City. Location signs for access and street exits are recommended for the river bike paths as well as the beach bike paths.
- Kiosks could be placed along some Class I bicycle paths such as the beach bike path and river bike paths that include a map and other helpful information about the route, safety and the City.

## Bikeway Signing Program, continued

- Bicycle stencils on the pavement, once approved by Caltrans are recommended on bikeways.

### *Implementation*

The implementation phasing of a bicycle signing program would prioritize signs by

- Improving or replacing signs on existing bikeways
- Determining and installing location signs on off street bike paths
- Determining and installing safety signs throughout the city
- Determining and installing kiosks on certain bike lanes
- Including signs on all short-term priority bikeways
- Including signs on mid- and long-term bikeways

**Figure 10**  
**Recommended**  
**Bike Logo Sign**  
**for Long Beach**



**Project 2:  
Bicycle Parking  
Program**

The bicycle community has identified the lack of bicycle parking as one of the major obstacles in using cycling for transportation.

***Ranking - Short-term  
General***

Specific bicycle parking design guidelines should be developed to help city staff, developers and commercial districts.

***Responsibility - Long  
Beach City and Private  
Businesses***

Guidelines will determine the location and type of bicycle parking to be provided as well as create standards for new development in which a required amount of bicycle parking be allocated based on gross leaseable square feet. An example of parking guidelines are provided in the Design and Maintenance Chapter of this Plan.

***Existing Problem -  
Inadequate bicycle  
parking throughout the  
City***

This Citywide program would provide and install and upgrade bike racks at parks, public buildings, transit centers and stops, park and ride lots and some bike paths:

***Classification - N/A***

***Length/Width - N/A***

- Bicycle lockers and racks at the park-and-ride stations at Artesia Boulevard and the Long Beach Freeway; and at Donald Douglas Loop and Wardlow Road
- Racks in all parks that now have no bicycle parking
- Racks in front of all City buildings, community centers and libraries that have no bicycle parking
- Racks along the San Gabriel River bike path scattered near the exits (Westminster Avenue, Pacific Coast Highway, the intersection of Coyote Creek, Willow Street, Wardlow Road and Del Amo Boulevard)

The City should also set up a "business bicycle parking program" to permit racks on request of the local businesses on City property in retail districts citywide. The following locations are suggested and should be considered as priorities:

***Discrete Locations***

- Downtown
- The Convention Center area